USEPA SF
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SSFSF 8/8/1984

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
Part 1 - Site Information and Assessment

I. IDENTIFICATION

01 State	02 Site Number
WA	D009069717

II. SITE NAME AND LOCATION

01 Site Name (legal, common, or descriptive name of site)	02 Street, Route No., or Specific Location Identifier
Spokane Steel Foundry	N Sullivan Rd Spok. Indus. Park

03 City	04 State	05 Zip Code	06 County	07 County Code	08 Cong Dist
Spokane	WA	99216	Spokane	063	05

09 Coordinates Latitude	Longitude	Section/Township/Range
474135.0	1171054.0	S1/2, Sec 1, T25N, R44E, WM

10 Directions to Site (starting from nearest public road)

Travel N from Sullivan St., exit off I-90 approx. 1.25 mi to Spokane Industrial Park, Building 1

III. RESPONSIBLE PARTIES

01 Owner (if known)	02 Street (business, mailing, residential)
Spokane Industries, Inc.	P.O. Box 3305

03 City	04 State	05 Zip Code	06 Telephone Number
Spokane	WA	99220	(509) 9280750

07 Operator (if known and different from owner)	08 Street (business, mailing, residential)
Robert Tenold, Gen. Mgr.	P.O. Box 3305

09 City	10 State	11 Zip Code	12 Telephone Number
Spokane	WA	99220	(509) 9281023

13 Type of Ownership (check one)

(X) A. Private ( ) B. Federal: ( ) C. State ( ) D. County ( ) E. Municipal
( ) F. Other: ( ) G. Unknown

14 Owner/Operator Notification on File (check all that apply)

( ) A. RCRA 3001, Date Rec'd: / / ( ) B. Uncontrolled Waste Site (CERCLA 103c), Date Rec'd: / / (X) C. None

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 On Site Inspection

(X) Yes, Date: 8/3 -1 84 ( ) No

By (check all that apply):

( ) A. EPA ( ) B. EPA Contractor (X) C. State ( ) D. Other Contractor
( ) E. Local Health Official ( ) F. Other:

Contractors Name(s):

02 Site Status (check one)

(X) A. Active ( ) B. Inactive ( ) C. Unknown

03 Years of Operation

beginning year 1981 ending year Pres ( ) Unknown

04 Description of Substances Possibly Present, Known, or Alleged

WDOE fish bioassay results show that Baghouse No. 2 and 4 produce dangerous waste. Dust from baghouse emissions contain heavy metals. Baghouse dust dumped in open gravel pit.

05 Description of Potential Hazard to Environment and/or Population

Dusts have been disposed into an abandoned gravel pit which overlies the Spokane aquifer, a sole source aquifer.

V. PRIORITY ASSESSMENT

01 Priority for Inspection (check one; if high or medium is checked, complete Part 2 and Part 3)

( ) A. High (inspection required promptly) (X) B. Medium (inspection required) ( ) C. Low (inspect on time available basis) ( ) D. None (no further action needed complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 Contact	02 Of (agency/organization)	03 Telephone Number
Ned Therien	WDOE	(208) 4596352

04 Person Responsible for Assessment	05 Agency	06 Organization	07 Telephone Number	08 Date
Patricia O'Flaherty	N/A	JRB Associates	(206) 7477899	08 08 84

Modified (5/84) from EPA Form 2070-12 dated 7/81

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

Summary Memorandum

Site ID: WA D009069717

County. Spokane

Priority Assessment: MEDIUM

Backlog Red. Cat.:

Date/Revised: 08/16/84

Name and Location:

Spokane Steel Foundry
N. Sullivan Rd. (Spokane Ind. Park)
Spokane, WA 99216

Contact: Robert Tenold
Telephone: (509) 928-1023
Site Status: (X) Active ( ) Inactive ( ) Unknown

Site Description/TSD Activities:

Steel foundry emissions (baghouse dusts) have been disposed into an abandoned gravel pit which overlies Spokane's sole source aquifer. Site has been accepting wastes since 1968.

Waste Types/Quantities/Characteristics:

Baghouse emissions contain heavy metals including chromium, cadmium, selenium, and lead. Baghouse dust sample trivalent chromium concentration reported at 1900 mg/kg. Total quantities of baghouse emissions dumped on approx. ten acre site is around 200 tons.

Physical/Social Environment:

Landfill overlies sole source aquifer for Spokane; depth to groundwater is from 74-106ft. No surface waters on site; slope of facility is less than 1%. Population served by groundwater in 3-mile radius is greater than 10,000.

Pollutant Mobilization/Pathways/Risk:

Concern that metals in waste piles could leach into groundwater. Trentwood and Irwin water districts within 3 miles. Little potential for surface water contamination due to lack of water and slope characteristics.

Priority Assessment/Backlog Reduction Category:

MEDIUM: Site has potential for groundwater contamination if metals can leach to aquifer. Population served by aquifer is greater than 10,000.

Followup Recommendations:

Monitor groundwater from surrounding domestic and industrial wells for heavy metal content. Soil sampling should be conducted. Laboratory simulation of baghouse dust leaching properties utilizing appropriate pH ranges for local rainfall. Removal of baghouse materials (contaminated soils) from gravel pit for disposal in hazardous waste dump.

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
Part 1 - Site Information and Assessment

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01 On Site Inspection

(X) Yes, Date: 83 /-- /84 ( ) No

By (check all that apply): ( ) A. EPA ( ) B. EPA Contractor (X) C. State ( ) D. Other Contractor ( ) E. Local Health Official ( ) F. Other:

Contractors Name(s):

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VI. INFORMATION AVAILABLE FROM

01 Contact	02 Of (agency/organization)	03 Telephone Number
Ned Therien	WDOE	(206)4596352

04 Person Responsible for Assessment	05 Agency	06 Organization	07 Telephone Number	08 Date
Patricia O'Flaherty	N/A	JRB Associates	(206)7477899	08 /08 /84

Modified (5/84) from EPA Form 2070-12 dated 7/81

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
Part 2 - Waste Information

I. IDENTIFICATION

01 State	02 Site Number
WA	D009069717

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 Physical States (check all that apply)

( ) A. Solid
( ) E. Slurry
(X) B. Powder, Fines
( ) F. Liquid
( ) C. Sludge
( ) G. Gas
( ) D. Other:

02 Waste Quantity at Site (measures of waste quantities must be independent)

Tons: 204
Cubic Yards:
No. of Drums:

03 Waste Characteristics (check all that apply)

(X) A. Toxic
( ) E. Soluble
( ) I. Highly Volatile
( ) B. Corrosive
( ) F. Infectious
( ) J. Explosive
( ) C. Radioactive
( ) G. Flammable
( ) K. Reactive
(X) D. Persistent
( ) H. Ignitable
( ) L. Incompatible
( ) M. Not Applicable

III. WASTE TYPE

Category	Substance Name	01 Gross Amount	02 Unit of Measure	03 Comments
SLU	Sludge			
OLW	Oily Waste			
SOL	Solvents			
PSD	Pesticides			
OCC	Other Organic Chemicals			
IOC	Inorganic Chemicals			
ACD	Acids			
BAS	Bases			
MES	Heavy Metals	204.38	Tons	Baghouse Dusts (K061)

IV. HAZARDOUS SUBSTANCES (see Appendix for most frequently cited CAS numbers)

01 Cat.	02 Substance Name	03 CAS Number	04 Storage/Disposal Method	05 Concentration	06 Measure of Concentration
MES	Hexavalent Chromium	Unknown	LF	40	mg/kg
MES	Trivalent Chromium	Unknown	LF	1900	mg/kg
MES	Cadmium (EP Tox)	Unknown	LF	0.22	mg/l
MES	Selenium (EP Tox)	Unknown	LF	10	ug/l
MES	Lead (EP Tox)	Unknown	LF	1.8	mg/l

V. FEEDSTOCKS (see Appendix for CAS numbers

Category	01 Feedstock Name	02 CAS Number	Category	01 Feedstock Name	02 CAS Number
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (cite specific references, e.g., state files, etc.)

WDOE Eastern Regional Files
Sample Results 3/22/83 from WA Dept. of Labor & Industries #N-7057
Sample Results 5/11/83 WDOE #030-1-673

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
Part 3 - Description of Hazardous Conditions & Incidents

I. IDENTIFICATION

01 State	02 Site Number
WA	D009069717

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 (X) A. Groundwater Contamination 02 ( ) Observed (Date:) (X) Potential ( ) Alleged

03 Population Potentially Affected: >10,000 04 Narrative Description

Gravel pit which receives foundry baghouse emission wastes overlies Spokane Valley Rathdrum Prairie Aquifer, a sole source aquifer for Spokane. Depth to aquifer is 74-106ft.

01 (X) B. Surface Water Contamination 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

03 Population Potentially Affected: Unknown 04 Narrative Description

Nearest surface water is Spokane River 0.75 mile South. One year, 24 hour rainfall is 1.67 inches and average slope to the river is LT 2%. Unlikely surface water contamination.

01 (X) C. Contamination of Air 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

03 Population Potentially Affected: Unknown 04 Narrative Description

None reported.

01 (X) D. Fire/Explosive Conditions 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

03 Population Potentially Affected: Unknown 04 Narrative Description

None reported; no documented or certified threat.

01 (X) E. Direct Contact 02 ( ) Observed (Date:) (X) Potential ( ) Alleged

03 Population Potentially Affected: Unknown 04 Narrative Description

None reported. Gate to facility is only a wire across entrance road. Access into pit is not monitored. Potential for direct contact does exist.

01 (X) F. Contamination of Soil 02 ( ) Observed (Date:) (X) Potential ( ) Alleged

03 Area Potentially Affected (acres): 10 04 Narrative Description

Gravel pit receives baghouse emission dusts which are fine powders and can potentially contaminate soils at site.

01 (X) G. Drinking Water Contamination 02 ( ) Observed (Date:) (X) Potential ( ) Alleged

03 Population Potentially Affected: >10,000 04 Narrative Description

Gravel pit receiving wastes is unlined and overlies the sole source aquifer for the Spokane area. Two water districts have wells within a three mile radius. Movement of groundwater unknown.

01 (X) H. Worker Exposure/Injury 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

03 Workers Potentially Affected: 0 04 Narrative Description

Gravel pit is a waste pit with no workers on site.

01 (X) I. Population Exposure/Injury 02 ( ) Observed (Date:) (X) Potential ( ) Alleged

03 Population Potentially Affected: Unknown 04 Narrative Description

The greatest potential for population exposure is from direct contact with the site as it is easily accessible. Lack of surface waters on site and high soil permeability reduce potential for population exposure.

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
Part 3 - Description of Hazardous Conditions & Incidents

I. IDENTIFICATION

01 State	02 Site Number
WA	D009069717

II. HAZARDOUS CONDITIONS AND INCIDENTS (continued)

01 (X) J. Damage to Flora 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

04 Narrative Description
None reported.

01 (X) K. Damage to Fauna 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

04 Narrative Description (include name[s] of species)
None reported. WDOE performed bioassays on four samples of baghouse dust and No. 2 and 4 were toxic to fish (rainbow trout).

01 (X) L. Contamination of Food Chain 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

04 Narrative Description
None reported.

01 (X) M. Unstable Containment of Wastes (spills/runoff/standing liquids/leaking drums) 02 ( ) Observed (Date:) (X) Potential ( ) Alleged

03 Population Potentially Affected: >10,000 04 Narrative Description
Gravel pit is unlined. Heavy metals such as lead could potentially leach into groundwater.

01 (X) N. Damage to Offsite Property 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

04 Narrative Description
None reported.

01 (X) O. Contamination of Sewers, Storm Drains, WWTPs 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

04 Narrative Description
None reported.

01 (X) P. Illegal/Unauthorized Dumping 02 ( ) Observed (Date:) ( ) Potential ( ) Alleged

04 Narrative Description
None reported.

05 Description of Any Other Known, Potential, or Alleged Hazards
None known.

III. TOTAL POPULATION POTENTIALLY AFFECTED: >10,000

IV. COMMENTS

Although the foundry wastes are dumped in an unlined gravel pit, depth to the sole source aquifer is 75ft or more and therefore groundwater contamination potential is low.

V. SOURCES OF INFORMATION (cite specific references: state files, reports, etc.)

WDOE Files; WDOE Well Logs; Water Supply Bulletin #27; Spokane City Population Report, 1981; USGS 7.5' Topo - Greenacres 1973; Pers. Comm. D. Sanders WDSHS